Ch 3 202

Rev Key p167 - 1-25, 30, 32, 34-40 p784 #16

1. alternate
2. ⊥
3. parallel
4. transversal
5. alt. exterior
6. ≅
7. consecutive (s-side)
8. corr.
9. alt. ext
10. s-side int
11. corr
12. alt int
13. s-side int
14. alt ext
15. alt int
16. 127
17. 53
18. 127
19. 127
20. 53
21. 127

23. $\overleftrightarrow{AB}$ $m = \frac{1--1}{-4-3} = \frac{2}{-7}$

$\overleftrightarrow{CD}$ $m = \frac{2-9}{2-0} = \frac{-7}{2}$

Neither

24. $\overleftrightarrow{AB}$ $m = \frac{2--2}{6-2} = \frac{4}{4} = 1$

$\overleftrightarrow{CD}$ $m = \frac{-4-2}{-1-5} = \frac{-6}{-6} = 1$

Parallel

25. $\overleftrightarrow{AB}$ $m = \frac{-3-5}{1-4} = \frac{-8}{-3} = \frac{8}{3}$

$\overleftrightarrow{CD}$ $m = \frac{2--1}{-7-1} = \frac{3}{-8}$

⊥

30. (2,5) (-2,-1)

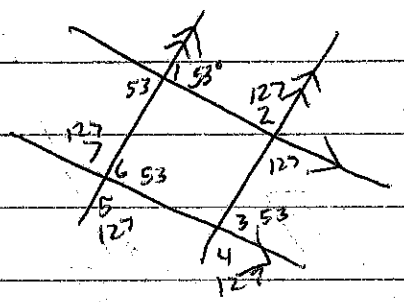
$m = \frac{5--1}{2--2} = \frac{6}{4} = \frac{3}{2}$

$y = \frac{3}{2}x + b$

$5 = \frac{3}{2}(2) + b$

$2 = b$

$y = \frac{3}{2}x + 2$



22. $3a + 40 + 2a + 25 = 180$

$5a + 65 = 180$

$5a = 115$

$a = 23$

$m\angle = 3(23) + 40 = 109$

$5b - 26 = 109$

$5b = 135$

$b = 27$

$(2,-4)$

32. $y = \frac{-3}{2}x + b$

$-4 = \frac{-3}{2}(2) + b$

$+3 \quad +3$

$-1 = b$

$\boxed{y = \frac{-3}{2}x - 1}$

$(3,-1)\ (-4,6)$

34. $m = \frac{6-(-1)}{-4-3} = \frac{7}{-7} = -1$

$y = -x + b$

$6 = -(-4) + b$

$4 + b$

$2 = b$

$\boxed{y = -x + 2}$

35. $\overleftrightarrow{AL} \parallel \overleftrightarrow{JB}$ alt ext

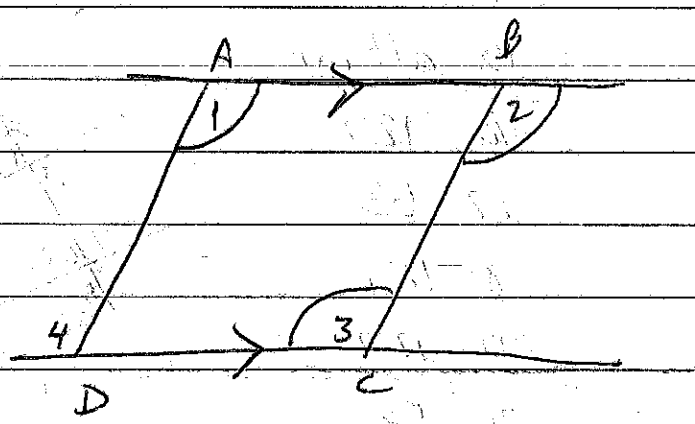
36. $\overleftrightarrow{AL} \parallel \overleftrightarrow{JB}$ s-side int

37. $\overleftrightarrow{CF} \parallel \overleftrightarrow{GK}$ 2 lines $\perp$ to same line

38. $\overleftrightarrow{AC} \parallel \overleftrightarrow{JB}$ alt int.

39. $\overleftrightarrow{CF} \parallel \overleftrightarrow{GK}$ s-side int

40. $\overleftrightarrow{CF} \parallel \overleftrightarrow{GK}$ corr. $\angle$s



p784

#16 $\angle 1 \cong \angle 3$

G: $\overline{AB} \parallel \overline{DC}$

P: $\overline{BC} \parallel \overline{AD}$

Statements	Reasons
① $\angle 1 \cong \angle 3$; $\overline{AB} \parallel \overline{DC}$	① Given
② $\angle 3 \cong \angle 2$	② If $\parallel$, alt int $\angle$s $\cong$
③ $\angle 1 \cong \angle 2$	③ Transitive
④ $\overline{BC} \parallel \overline{AD}$	④ If corr $\angle$s $\cong$, then the lines $\parallel$.